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Understanding The Design Approach of Colonial Churches: De Nieuwe Kerk and De Oosterkerk in Bandung

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Abstract

In the 1920's Bandung was a new emerging city with widely open opportunities for architects to experiment and express their creativity in designing new buildings. In accordance with the significant European population growth, many Catholic and Protestant churches were constructed in the 1920's to 1940's period. De Oosterkerk, now GPIB Maranatha, designed by F. W. Brinkman in 1926 was one of the early colonial Protestant churches in Bandung. The construction itself finished in the following year, following De Nieuwe Kerk's construction, which is now GPIB Bethel at Jalan Wastukencana. De Nieuwe Kerk that was designed by C. P. Wolff Schoemaker had a different architectural style compared to de Oosterkerk. Schoemaker had come forth with more elaborate details in his church. While Brinkman created a more conservative style. This article reveals some of the architectural design approaches of both churches and shows each style and its uniqueness.

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1. Introduction

In 1906, the colonial Dutch East-Indies Government decided to promote Bandung as *gemeente*, an autonomous city government, which consequently affected the city's development.¹ Bandung experienced a faster growth after

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¹Kunto, 1986, p. 264. As the consequences the colonial government should provide the infrastructure and major public buildings, such as government offices, schools, hospital and churches.

the decision of the colonial government to move the capital city from Batavia to Bandung. Bandung is one of the most important cities in the context of colonial architecture, especially the Art-Deco style. The Art-Deco style is believed to become popular after the *Exposition Internationale des Arts Décoratifs et Industriels Modernes* held in Paris in 1925.² This was the same period when Bandung was rapidly developing, marked by the establishment of *De Technische Hoogeschool te Bandung* in 1920 and the construction of Gedung Sate. During this period, there were a lot of famous architects that contributed to the development of Bandung, such as Albert Aalbers, Thomas Karsten, Henri Maclaine Pont, J. Geber, C.P.W. Schoemaker, F.W. Brinkman and many others.

There were many Catholic churches and a few Protestant churches built in Bandung during the colonial period. Even though the numbers of Dutch Protestant followers were small compared to the Roman Catholic, their presence contributed significant architectural design. There are two Protestant colonial churches found in Bandung, namely *De Oosterkerk*, now *GPIB Maranatha*, designed by F. W. Brinkman in 1926 and *De Nieuwe Kerk*, now *GPIB Bethel*, designed by C. P. Wolff Schoemaker around 1924-1925.³ These two Protestant colonial churches implemented different styles, in regard to shape, detail and ornaments. The preliminary study of these two churches will provide a general overview of how Protestant colonial churches were designed during this time.

2. Research Design and Methods

This research was proposed to obtain an understanding of approaches implemented by architects in designing churches during the colonial period in Bandung. This research focused on two churches that are relatively similar in space requirement and programs, and are currently managed by the same church organization, *Gereja Protestan di Indonesia bagian Barat* (GPIB). Both churches were constructed in the same period 1926-1927 and were designed by two well-known Dutch architects.

Design approach in architecture could be understood in an extensive and multifaceted way. Educational background of the architect may influence the chosen design approach. Taking these two churches as case studies, we may understand the design approach taken by the architects, and the influences that might have taken during the colonial period. This article is based on preliminary research on colonial churches in Bandung and a brief assessment within the analysis of spatial configuration and building appearance.

The survey was proposed for documenting the building dimension and its interior-exterior appearances. All data gained from field survey was combined with the original architectural drawings and old pictures. Data were processed and elaborated using photogrammetric techniques and 3D software to build a 3-dimensional model. The shape of the building was reconstructed into its original design by referring to original pictures that were published in earlier time. This 3D model is aimed to obtain the design's originality and, therefore, to understand the architects' design approach in a perfect way. Misinterpretation due to changes and modification over decades can be eliminated.

The measurement from the field survey was recorded and scaled in detail, up to the millimeter. Based on the field measurements, we know that both buildings do not have a perfect geometrical perpendicular construction, and this is what we can expect from colonial buildings. Referring to the field survey measurements, a more clear and precise geometrical measurement can be estimated. Some assumptions and adjustments were taken to build the 3D model. Measurement correction was applied to match symmetrical shapes, such as the left and the right part of the building. The investigation of the original design and the 3D modeling was part of the study.

3. Discussion

3.1. *De Nieuwe Kerk (GPIB Bethel)*

The building, lengthwise, stretches from East to West, and the main entrance is on the East side. The church consists of two main rooms. The main hall is on the front/east side and used for the congregation, and the consistory

²http://en.wikipedia.org/wiki/Art_Deco The term Art-Deco itself was first introduced by Le Corbusier in his journal *L'Esprit nouveau*.

³Original working drawing of *De Oosterkerk*, and original documents of *De Nieuwe Kerk* in 1925.

room is on the back/west side. The congregation hall has a Portuguese-Cross shaped plan, whereas the consistory room on the west side has a common cross-shaped plan.⁴ This plan combination was very common in the early Christian era in Roman Catholic churches, which was known as the Greek-Cross plan. The first church applying this plan composition was the San Sebastiano in Mantua-Italy (1460) by Leon Battista Alberti during the Renaissance era.⁵ The clock tower is located on the southern side of the entrance, breaking the symmetrical composition of the building.

The central part of the congregation hall is designed as 12 x 12 meter square plan with an extension of 4 meters to the front, left and right side, and 5.5 meters to the back side. This slight difference in length made it not a perfect Portuguese-Cross plan and made it rather similar to the Roman Catholic churches. Referring to the eaves' 12 meter height in the main room, the building design was presumably developed from the main hall's form, which is a cube shape. The roof shape is a pyramid with a height of about 6 meters, which is just half the cube height. This is an indication that geometrical proportion had been used by Schoemaker in designing this church. It is well-known that geometry was extensively used in architecture since the Classical era, and even more in Romanesque and Gothic style building in Europe.

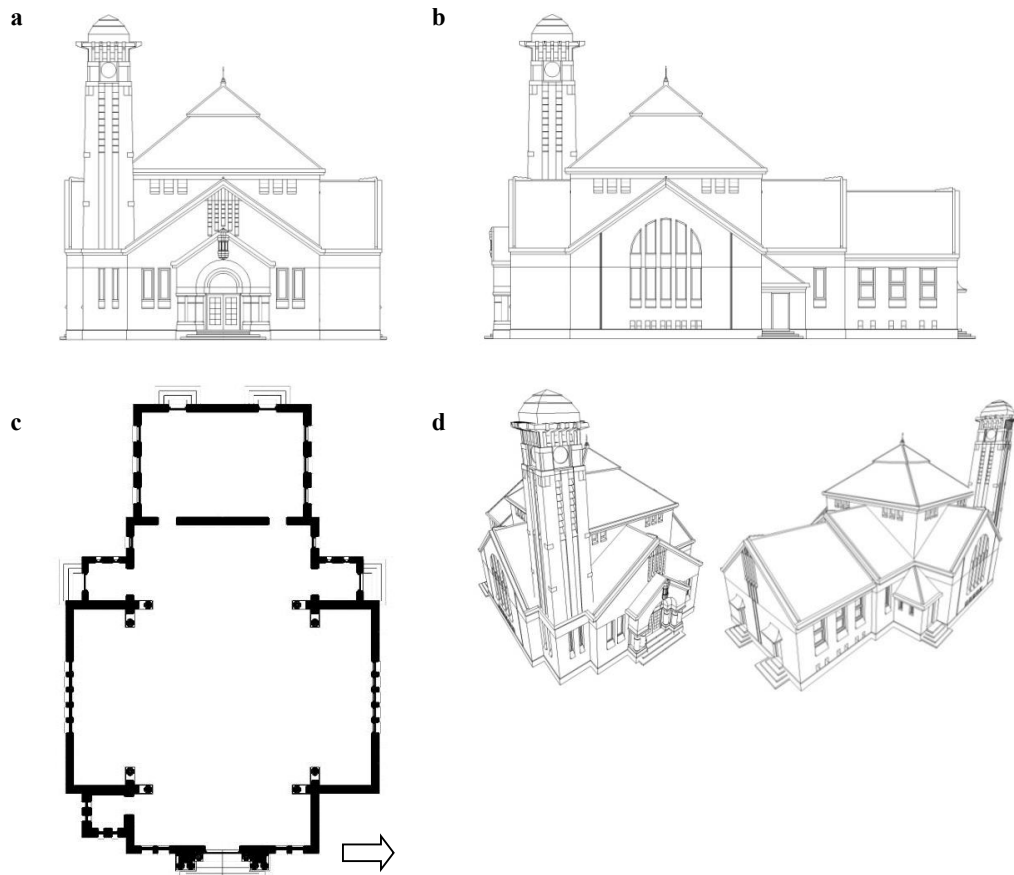


Fig. 1. (a) Front Elevation – East; (b) Left Elevation – North; (c) Plan; (d) Perspective view of De Nieuwe Kerk (GPIB Bethel);

⁴The Portuguese Cross is a cross with equal arm length, which was also called as Greek Cross.

⁵Wikipedia: [http://en.wikipedia.org/wiki/San_Sebastiano_\(Mantua\)](http://en.wikipedia.org/wiki/San_Sebastiano_(Mantua))

In addition to these indications of Roman church design approach, Schoemaker had also been influenced by local traditional design. The roof shape is composed of a two-stacked roof, which is commonly used in Javanese traditional buildings. A single-pointed stacked roof style is mostly used on traditional religious buildings, such as the Demak Great Mosque in Central Java.

De Nieuwe Kerk creates classic styled columns that are similar to Corinthian styled columns, in the entrance, as well as, in the interior. This indicates that the design is influenced by the Byzantine and Greek architectural style. This can be undoubtedly confirmed by its similarity in architectural ornamentation to the capital of columns at Hagia Sophia in Turkey, which was constructed in 537 as an Eastern Orthodox Cathedral. The church's row of columns in its entrance part would be considered as referring to the Romanesque styled doorways, which was also found in Roman architecture. Row ornaments on the upper side of the column are also similar to those of Greek and Roman architecture.

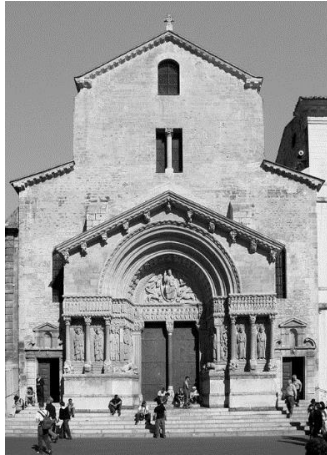


Fig. 2. Facade of St. Trophime Arles, France. Source: http://en.wikipedia.org/wiki/Romanesque_architect.



Fig. 3. Entrance/ doorway ornament of De Nieuwe Kerk (GPIB Bethel).

3.2. *De Oosterkerk (GPIB Maranatha)*

The building, lengthwise, stretches from South to North. The main entrance is located on the left and right side beneath the clock tower. The side entrance is well exposed and provides easy access for daily use. It was probably

designed as the main entrance as well since the Church is located at the intersection of Jalan Taman Cibeunying Utara on the West and Jalan Bengawan on the East.

The church is composed of two rooms: the main congregation hall in the center and the consistory room on the North side. The church was designed in a perfect symmetrical shape with an exception at the back entrance, which allows direct access to the consistory room from outside. Based on a copy of the original drawing made by F. W. Brinkman in 1926, the consistory room was formerly located on the East side of the podium at the outer corner of the building. It was a small room that was probably designed as a priest's room, before the design was changed into the current state during construction⁶.

The church exhibits a Portuguese or Greek-cross plan shape. The arms of the cross are projected equally at each side. However, considering the three-dimensional shape of the church, it is understandable that the front part, which contains the tower and the entrance terrace, are additions to the main part of the building. The main part itself is mainly a combination of two blocks while the consistory room, which is situated on the back side, is clearly an addition to it. Brinkman seems to be conservative in his design approach, because he implemented a typical church design of the late 19th century and the beginning of 20th century, which was popular in the Netherlands after the World War I. This architectural style was called 'traditionalism', as a response to the functionalism and expressionism of the Amsterdam School. The church St. Paschalis Baylon in Den Haag by A.J. Kropholler in 1919 was the precedent of this style.

Only a few ornaments can be found on this church. This church was designed in a very simple shape and less ornamental. In fact, there is no detailed architectural drawing found in the original documents. The only part that was elaborate is the tower. A weathercock, which is shown in the original drawing, is currently replaced with a cross. The weathercock was commonly used on the top of Protestant churches, as shown in the Middle Dutch Church in New York in 1729.



Fig. 4. The Middle Dutch Church, New York. Source: <http://freepages.history.rootsweb.ancestry.com/~wcarr1/Lossing1/Chap55.html>.

⁶A copy of original architectural drawing shows two design of the church, indicating the design revision.



Fig. 5. St. Paschalis Bylon, Den Haag. Source: http://commons.wikimedia.org/wiki/File:Den_Haag_-_Wassenaarseweg_53_-_Paschalis_Baylon_v1.JPG.

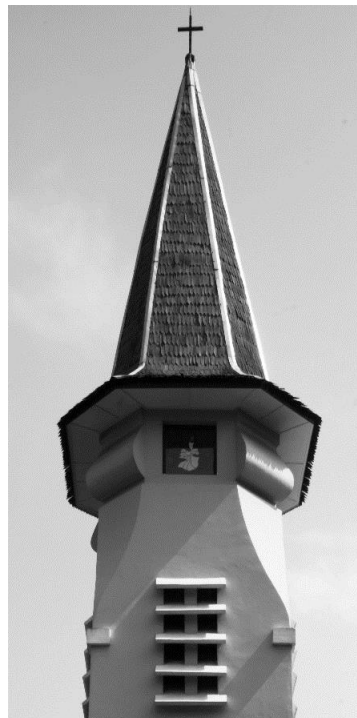


Fig. 6. The tower of De Oosterkerk (GPIB Maranatha).

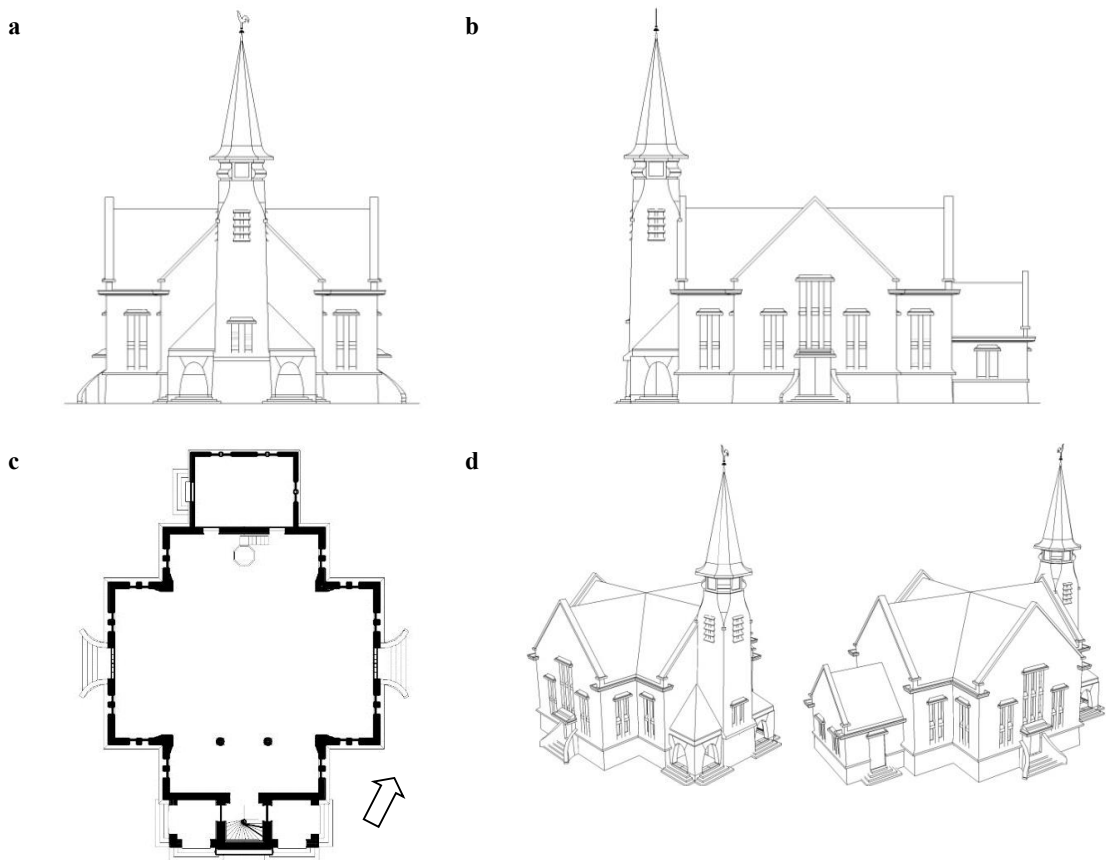


Fig. 7. (a) Front Elevation – South; (b) Left Elevation – East; (c) Plan; (d) Perspective view of De Oosterkerk (GPIB Maranatha).

4. Conclusion

Despite different architectural forms, both churches applied the same Portuguese-Cross or Greek-Cross plan. The room compositions are similar in both churches, where both consist of two rooms: congregation hall and consistory room. The congregation hall in the center provides direct access from the main entrance as well as from the side entrance. The consistory room is located at the back side. Both churches have an asymmetrical shape, with an exception of the placement of the tower at *De Nieuwe Kerk*.

Both churches provide three entrances to the congregation hall and another two accesses behind the podium, which connects to the consistory room. The only difference between the two, in terms of circulation and access, is that the main entrance of *De Oosterkerk* (GPIB Maranatha) is at the left and the right part of the front side. The main entrance allows people to enter a small room under the tower and access to the hall through the single entrance on the main axis. The side entrance is attractive enough to be used as an informal main entrance. The side entrance of *De Nieuwe Kerk* is rather hiding at the back side of the building and unseen from the front elevation.

A creative design was also proofed to have developed among architects during the Dutch colonial period. Even though both churches were designed in the same period, with the same purpose and function as a Protestant church, these two architects share some differences as well as some similarities. Similar design approaches can be found on how both excavate the idea of Christian architecture using historical references. The classical Portuguese or Greek-cross plan was applied in both churches, indicating the influence of conservative church design. The church design

of Schoemaker displays how his ideas referred to Romanesque church style, whereas Brinkman's design approach referred to traditionalism. Both churches contribute a significant role in defining Bandung; not only by providing evidence of its history, but by also enriching it with several architectural styles.

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